

AMENDMENTS TO THE SPECIFICATION:

Please replace the paragraph on page 9, lines 12-20, with the following amended paragraph:

The present inventors have also isolated nucleic acids encoding the enzyme β -carotene hydroxylase, which is responsible for hydroxylating the β -endgroup in carotenoids. The nucleic acid of the present invention is shown in SEQ ID NO:3 and Figure 5. The full length cDNA product hydroxylates both end groups of β -carotene as do products of cDNAs which encode proteins truncated by up to 50 amino acids from the N-terminus. Products of genes which encode proteins truncated between about 60-110 amino acids from the N-terminus preferentially hydroxylate only one ring. A plasmid containing this gene was deposited with the American Type Culture Center, 10801 University Boulevard, Manassas, VA 20110-2209 ~~12301 Parklawn Drive, Rockville MD 20853~~ on March 4, 1996 under ATCC accession number 98003 (pATOHB-A. *thaliana*).